

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/539,110  
Source: IFWP  
Date Processed by STIC: 2/26/07

# ***ENTERED***



IFWP

## RAW SEQUENCE LISTING

DATE: 02/26/2007

PATENT APPLICATION: US/10/539,110

TIME: 12:03:45

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\02262007\J539110.raw

3 <110> APPLICANT: HALOZYME INC.  
 4 Frost, Gregory I.  
 5 Kundu, Anirban  
 6 Bookbinder, Louis H.  
 8 <120> TITLE OF INVENTION: HUMAN CHONDROITINASE GLYCOPROTEIN (CHASEGP), PROCESS FOR  
 PREPARING THE  
 9 SAME, AND PHARMACEUTICAL COMPOSITIONS COMPRISING THEREOF  
 11 <130> FILE REFERENCE: HALO1330-1 (Formerly DELIA1330-1)  
 13 <140> CURRENT APPLICATION NUMBER: US 10/539,110  
 C--> 14 <141> CURRENT FILING DATE: 2005-06-13  
 16 <150> PRIOR APPLICATION NUMBER: PCT/US 03/40090  
 17 <151> PRIOR FILING DATE: 2003-12-15  
 19 <150> PRIOR APPLICATION NUMBER: US 60/433,532  
 20 <151> PRIOR FILING DATE: 2002-12-16  
 22 <160> NUMBER OF SEQ ID NOS: 10  
 24 <170> SOFTWARE: PatentIn version 3.1  
 26 <210> SEQ ID NO: 1  
 27 <211> LENGTH: 481  
 28 <212> TYPE: PRT  
 29 <213> ORGANISM: Homo sapiens  
 31 <400> SEQUENCE: 1  
 33 Met Lys Val Leu Ser Glu Gly Gln Leu Lys Leu Cys Val Val Gln Pro  
 34 1 5 10 15  
 37 Val His Leu Thr Ser Trp Leu Leu Ile Phe Phe Ile Leu Lys Ser Ile  
 38 20 25 30  
 41 Ser Cys Leu Lys Pro Ala Arg Leu Pro Ile Tyr Gln Arg Lys Pro Phe  
 42 35 40 45  
 45 Ile Ala Ala Trp Asn Ala Pro Thr Asp Gln Cys Leu Ile Lys Tyr Asn  
 46 50 55 60  
 49 Leu Arg Leu Asn Leu Lys Met Phe Pro Val Ile Gly Ser Pro Leu Ala  
 50 65 70 75 80  
 53 Lys Ala Arg Gly Gln Asn Val Thr Ile Phe Tyr Val Asn Arg Leu Gly  
 54 85 90 95  
 57 Tyr Tyr Pro Trp Tyr Thr Ser Gln Gly Val Pro Ile Asn Gly Gly Leu  
 58 100 105 110  
 61 Pro Gln Asn Ile Ser Leu Gln Val His Leu Glu Lys Ala Asp Gln Asp  
 62 115 120 125  
 65 Ile Asn Tyr Tyr Ile Pro Ala Glu Asp Phe Ser Gly Leu Ala Val Ile  
 66 130 135 140  
 69 Asp Trp Glu Tyr Trp Arg Pro Gln Trp Ala Arg Asn Trp Asn Ser Lys  
 70 145 150 155 160  
 73 Asp Val Tyr Arg Gln Lys Ser Arg Lys Leu Ile Ser Asp Met Gly Lys  
 74 165 170 175  
 77 Asn Val Ser Ala Thr Asp Ile Glu Tyr Leu Ala Lys Val Thr Phe Glu

## RAW SEQUENCE LISTING

DATE: 02/26/2007

PATENT APPLICATION: US/10/539,110

TIME: 12:03:45

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\02262007\J539110.raw

```

78          180          185          190
81 Glu Ser Ala Lys Ala Phe Met Lys Glu Thr Ile Lys Leu Gly Ile Lys
82          195          200          205
85 Ser Arg Pro Lys Gly Leu Trp Gly Tyr Tyr Leu Tyr Pro Asp Cys His
86          210          215          220
89 Asn Tyr Asn Val Tyr Ala Pro Asn Tyr Ser Gly Ser Cys Pro Glu Asp
90 225          230          235          240
93 Glu Val Leu Arg Asn Asn Glu Leu Ser Trp Leu Trp Asn Ser Ser Ala
94          245          250          255
97 Ala Leu Tyr Pro Ser Ile Cys Val Trp Lys Ser Leu Gly Asp Ser Glu
98          260          265          270
101 Asn Ile Leu Arg Phe Ser Lys Phe Arg Val His Glu Ser Met Arg Ile
102          275          280          285
105 Ser Thr Met Thr Ser His Asp Tyr Ala Leu Pro Val Phe Val Tyr Thr
106          290          295          300
109 Arg Leu Gly Tyr Arg Asp Glu Pro Leu Phe Phe Leu Ser Lys Gln Asp
110 305          310          315          320
113 Leu Val Ser Thr Ile Gly Glu Ser Ala Ala Leu Gly Ala Ala Gly Ile
114          325          330          335
117 Val Ile Trp Gly Asp Met Asn Leu Thr Ala Ser Lys Ala Asn Cys Thr
118          340          345          350
121 Lys Val Lys Gln Phe Val Ser Ser Asp Leu Gly Ser Tyr Ile Ala Asn
122          355          360          365
125 Val Thr Arg Ala Ala Glu Val Cys Ser Leu His Leu Cys Arg Asn Asn
126          370          375          380
129 Gly Arg Cys Ile Arg Lys Met Trp Asn Ala Pro Ser Tyr Leu His Leu
130 385          390          395          400
133 Asn Pro Ala Ser Tyr His Ile Glu Ala Ser Glu Asp Gly Glu Phe Thr
134          405          410          415
137 Val Lys Gly Lys Ala Ser Asp Thr Asp Leu Ala Val Met Ala Asp Thr
138          420          425          430
141 Phe Ser Cys His Cys Tyr Gln Gly Tyr Glu Gly Ala Asp Cys Arg Glu
142          435          440          445
145 Ile Lys Thr Ala Asp Gly Cys Ser Gly Val Ser Pro Ser Pro Gly Ser
146          450          455          460
149 Leu Met Thr Leu Cys Leu Leu Leu Leu Ala Ser Tyr Arg Ser Ile Gln
150 465          470          475          480
153 Leu
157 <210> SEQ ID NO: 2
158 <211> LENGTH: 481
159 <212> TYPE: PRT
160 <213> ORGANISM: Mus musculus
162 <220> FEATURE:
163 <221> NAME/KEY: SIGNAL
164 <222> LOCATION: (1)..(34)
166 <400> SEQUENCE: 2
168 Met Gln Leu Leu Pro Glu Gly Gln Leu Arg Leu Cys Val Phe Gln Pro
169 1          5          10          15
172 Val His Leu Thr Ser Gly Leu Leu Ile Leu Phe Ile Leu Lys Ser Ile

```

## RAW SEQUENCE LISTING

DATE: 02/26/2007

PATENT APPLICATION: US/10/539,110

TIME: 12:03:45

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\02262007\J539110.raw

173		20		25		30										
176	Ser	Ser	Leu	Lys	Pro	Ala	Arg	Leu	Pro	Val	Tyr	Gln	Arg	Lys	Pro	Phe
177			35					40				45				
180	Ile	Ala	Ala	Trp	Asn	Ala	Pro	Thr	Asp	Leu	Cys	Leu	Ile	Lys	Tyr	Asn
181		50					55					60				
184	Leu	Thr	Leu	Asn	Leu	Lys	Val	Phe	Gln	Met	Val	Gly	Ser	Pro	Arg	Leu
185	65					70					75				80	
188	Lys	Asp	Arg	Gly	Gln	Asn	Val	Val	Ile	Phe	Tyr	Ala	Asn	Arg	Leu	Gly
189				85						90					95	
192	Tyr	Tyr	Pro	Trp	Tyr	Thr	Ser	Glu	Gly	Val	Pro	Ile	Asn	Gly	Gly	Leu
193			100						105					110		
196	Pro	Gln	Asn	Thr	Ser	Leu	Gln	Val	His	Leu	Lys	Gly	Ala	Gly	Gln	Asp
197			115					120					125			
200	Ile	Asn	Tyr	Tyr	Ile	Pro	Ser	Glu	Asn	Phe	Ser	Gly	Leu	Ala	Val	Ile
201		130					135					140				
204	Asp	Trp	Glu	Tyr	Trp	Arg	Pro	Gln	Trp	Ala	Arg	Asn	Trp	Asn	Thr	Lys
205	145					150					155				160	
208	Asp	Ile	Tyr	Arg	Gln	Lys	Ser	Arg	Thr	Leu	Ile	Ser	Asp	Met	Lys	Glu
209					165					170					175	
212	Asn	Ile	Ser	Ala	Ala	Asp	Ile	Glu	Tyr	Ser	Ala	Lys	Ala	Thr	Phe	Glu
213				180					185					190		
216	Lys	Ser	Ala	Lys	Ala	Phe	Met	Glu	Glu	Thr	Ile	Lys	Leu	Gly	Ser	Lys
217		195						200					205			
220	Ser	Arg	Pro	Lys	Gly	Leu	Trp	Gly	Tyr	Tyr	Leu	Tyr	Pro	Asp	Cys	His
221		210					215					220				
224	Asn	Tyr	Asn	Val	Tyr	Ala	Thr	Asn	Tyr	Thr	Gly	Ser	Cys	Pro	Glu	Glu
225	225				230						235				240	
228	Glu	Val	Leu	Arg	Asn	Asp	Leu	Ser	Trp	Leu	Trp	Asn	Ser	Ser	Thr	
229				245					250					255		
232	Ala	Leu	Tyr	Pro	Ala	Val	Ser	Ile	Arg	Lys	Ser	Phe	Ala	Asp	Ser	Glu
233				260					265					270		
236	Asn	Thr	Leu	His	Phe	Ser	Arg	Phe	Arg	Val	Arg	Glu	Ser	Leu	Arg	Ile
237		275						280					285			
240	Ser	Thr	Met	Thr	Ser	Gln	Asp	Tyr	Ala	Leu	Pro	Val	Phe	Val	Tyr	Thr
241		290					295					300				
244	Gln	Leu	Gly	Tyr	Lys	Glu	Glu	Pro	Leu	Leu	Phe	Pro	Phe	Lys	Gln	Asp
245	305					310					315				320	
248	Leu	Ile	Ser	Thr	Ile	Gly	Glu	Ser	Ala	Ala	Leu	Gly	Ala	Ala	Gly	Ile
249				325					330					335		
252	Val	Val	Trp	Gly	Asp	Met	Asn	Leu	Thr	Ser	Ser	Glu	Glu	Asn	Cys	Thr
253				340					345					350		
256	Lys	Val	Asn	Arg	Phe	Val	Asn	Ser	Asp	Phe	Gly	Ser	Tyr	Ile	Ile	Asn
257		355						360					365			
260	Val	Thr	Arg	Ala	Ala	Glu	Val	Ser	Ser	Arg	His	Leu	Cys	Lys	Asn	Asn
261		370					375					380				
264	Gly	Arg	Cys	Val	Arg	Lys	Thr	Trp	Lys	Ala	Ala	His	Tyr	Leu	His	Leu
265	385				390						395				400	
268	Asn	Pro	Ala	Ser	Tyr	His	Ile	Glu	Ala	Ser	Glu	Asp	Gly	Glu	Phe	Ile
269				405					410					415		

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/539,110

DATE: 02/26/2007

TIME: 12:03:45

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\02262007\J539110.raw

272 Val Arg Gly Arg Ala Ser Asp Thr Asp Leu Ala Val Met Ala Glu Asn  
 273                   420                   425                   430  
 276 Phe Leu Cys His Cys Tyr Glu Gly Tyr Glu Gly Ala Asp Cys Arg Glu  
 277                   435                   440                   445  
 280 Met Thr Glu Ala Ser Gly Pro Ser Gly Leu Ser Leu Ser Ser Ser Ser  
 281                   450                   455                   460  
 284 Val Ile Thr Leu Cys Leu Leu Val Leu Ala Gly Tyr Gln Ser Ile Gln  
 285 465                   470                   475                   480  
 288 Leu

292 &lt;210&gt; SEQ ID NO: 3

293 &lt;211&gt; LENGTH: 2414

294 &lt;212&gt; TYPE: DNA

295 &lt;213&gt; ORGANISM: Homo sapiens

297 &lt;400&gt; SEQUENCE: 3

```

298 cgcccgggca ggtctttatt ttatttatgc tatctatttc ttttcctttt tttttttttt      60
300 tttttgagat gaagtcttac tctgttgccc aggctggagt gtagtggtgt gatctcggct      120
302 cgctgcagcc actgctcctt ggggttcagg gattctcctg acttagcctc ctgagtggct      180
304 gggactgcag gagcatgcca tcatgccag ctgatttttg tatttttagt agagatgggg      240
306 tttcacctgt ttggccagaa tggtttgc tctgcacctc aagtgatctg cctgcctcag      300
308 cctcccaaaa tgttggttac aggggtgagc caccgtgcct tgctattaat gccatctatt      360
310 tctactgaaga ttccgcctct catttcttga gtcatttttt ttaaatttcc ttaaattgga      420
312 cttcacattt tctgatgcct ccttgtttag ctttaataact gaccttctga attctttttt      480
314 aggaaaatca ggaatttctt cttggtttgg agccattgct ggacatcctt tgccattcaa      540
316 cctctgattt gcacaagggt actaaaggac cagcagcaaa caaacggtt ggtcttctag      600
318 agtgcactaa agcagaagat acgtaacatt tttatcttac catgaaagta ttatctgaag      660
320 gacagttaaa gctttgtgtt gttcaaccag tacatctcac ttcattggctc cttatatatt      720
322 ttattctaaa gtctatctct tgtctaaaac ctgctcgact tccaatttat caaaggaaac      780
324 cttttatagc tgcttggaa gctccaacag atcagtgttt gataaaatat aatttaagac      840
326 taaatttgaa aatgtttcct gtgattggaa gccactggc caaggccagg gggcaaatg      900
328 tctactatatt ttatgtcaac agattgggat actatccgtg gtatacatca cagggggtcc      960
330 ccattaatgg aggtctccca cagaacataa gtttacaagt acatctggaa aaagctgacc      1020
332 aagatattaa ttattacatc cctgctgaag atttcagtgg acttgctgtt atagattggg      1080
334 aatattggag accacagtgg gcccggaact ggaactcaaa agatgtttac agacagaagt      1140
336 caagaaagct tatttccgat atgggaaaga atgtatcagc taccgatatt gaatatttag      1200
338 ccaaagtgac ctttgaagaa agtgcaaaag ctttcatgaa ggaaaccatc aaattgggaa      1260
340 ttaagagccg acccaaaggc ctttgggggt attatttata tcttgattgc cacaattata      1320
342 acgtttatgc cccaaactac tctgggtcat gccagaaga cgaagtcttg aggaacaatg      1380
344 agctctcttg gctctggaac agcagtgtct ctttatatcc ttctatctgt gtctggaaat      1440
346 cccttgga gaagtgaaaac attttgcgct tctccaaatt tgggtgcat gaatccatga      1500
348 ggatctccac catgacatct catgattatg ctctgcctgt atttgtctac acaaggctag      1560
350 ggtacagaga tgaaccttta tttttccttt ctaagcaaga tctagtcagc accataggag      1620
352 aaagtgtctc cttgggagct gcaggcattg ttatttgggg agacatgaat ttaactgcat      1680
354 ccaaggccaa ctgtacaaag gtgaagcagt ttgtgagttc tgatttaggg agctacatag      1740
356 ccaatgtgac cagagctgct gaggtatgca gccttcacct ctgcaggaa aatggcaggt      1800
358 gcataaggaa gatgtggaac gcgccagtt accttcactt gaacctgca agttaccaca      1860
360 tagaggcctc tgaggacggg gagtttactt tgaaaggaaa agcatctgat acagacctgg      1920
362 cagtgtggc agatacattt tctgtcatt gttatcaggg atatgaagga gctgattgca      1980
364 gagaaataaaa gacggctgat ggctgctctg gggtttcccc ttctcctggg tactaatga      2040
366 cactttgtct actgctttta gcaagttatc gaagcattca gttgtgagat aattgagttt      2100

```

## RAW SEQUENCE LISTING

DATE: 02/26/2007

PATENT APPLICATION: US/10/539,110

TIME: 12:03:45

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\02262007\J539110.raw

```

368 aaaggaatt gtgtggcctc tagcctagtc atttaaagaa ggatgtaact tataacattt 2160
370 tttttctctt atgaattcta ttgagagata ttataagtag acattatgta tgtcacttaa 2220
372 cataaacaga aacattattt tatttgcctc cagtctggct aggaaaccag atctggggta 2280
374 aagtcaatgt acacttcctc cttattggaa tattttaagtt gcatttaaac taaaactagt 2340
376 ataatttagt cttttcatga atgtacatac ataaaattat acataaaaaat attaaattat 2400
378 tcatttcaaa aaaa 2414
381 <210> SEQ ID NO: 4
382 <211> LENGTH: 3255
383 <212> TYPE: DNA
384 <213> ORGANISM: Mus musculus
386 <400> SEQUENCE: 4
387 tggctctgga gcaggtgaat aaaggaccag caggcaaaca aaagcaaagg tttttaaaca 60
389 tagtttatca cagctgttct gctgagagga gagtggcttt ttcactaact ccagtctata 120
391 tgtggcaaac ctgtctccac ccaaggaata gctattcacc tttttcgcta actggaagag 180
393 tgaaccaaag aggccttttg gattacgttg aagaaaagggt agtgaagggt ctatcttata 240
395 atgcaactat tgctgaagg acaattaaga ctctgtgttt ttcaaccagt acatcttaca 300
397 tcggggctgc tcatactttt tatcctgaag tctatctcat ccctaaaacc tgcccgaact 360
399 ccagtttatc aaaggaaacc ttttattgct gcttgggaatg ctccaacaga cctgtgtttg 420
401 ataaaatata atttaacact gaacttaaaa gtgtttcaga tgggttgaag ccctcggtc 480
403 aaagacaggg ggcaaatgt tgttatattt tatgccaaca gattgggata ttacccatgg 540
405 tatacatcag aaggggtacc catcaatggg ggtcttcccc aaaacacaag cttacaagta 600
407 cacctgaaag gggctggcca ggatattaat tattacatcc cttctgaaaa tttcagtga 660
409 cttgctgtta tagactggga atattggcgc ccacagtggg ccggaactg gaacacaaag 720
411 gatattctaca gacagaagtc aagaactctt atttctgata tgaaagagaa catatctgct 780
413 gctgatattg aatattcagc caaggcaact tttgagaaaa gtgcaaaagc tttcatggag 840
415 gaaactatca aattgggaag taagagcaga cccaagggcc tttgggggta ttatttatat 900
417 cctgattgcc acaattataa tgtttatgcc acaactata ctgggtcatg cccagaagag 960
419 gaagttttga ggaacaatga cctctcttgg ctctggaaca gcagtacagc cctgtatcct 1020
421 gctgtctaga ttaggaaatc ctttgcagac agtgaaaaca ctttgcactt ctcacgattt 1080
423 cgggtgcgtg aatcactgag gatttccacc atgacatcac aggattatgc tctgcctgta 1140
425 tttgtctaca cacagctggg ctacaaagag gaacctttac ttttcccttt taagcaagat 1200
427 ctaattagta ccataggaga aagtgcgtcg ttgggagcgg caggcattgt tgtttgggga 1260
429 gacatgaatt taacttcac tgaggagaac tgtacgaaag tgaaccgctt tgtgaattct 1320
431 gattttggca gctacataat caatgtgacc agagcagctg aggtgtccag tcgtcacctt 1380
433 tgcaagaata atgggaggtg tgtacggaag acatggaaag cagctcatta cctccatttg 1440
435 aaccctgcaa gttaccacat agaggcctct gaggatggag aattcatagt gaggggaaga 1500
437 gcatcagaca ctgacctagc tgtgatggca gagaatttcc tatgtcactg ttatgagggg 1560
439 tatgaggggg ctgactgtag agaaatgaca gaggccagtg gcccctcggg gctttccctt 1620
441 tcctctagct ctgtaataac actgtgtctg ctagttctag caggttatca aagcattcag 1680
443 ttgtgacata attgacttta aagggaatcg catcctttta aaaaggggtg tagggaacag 1740
445 atagacactc ttctctctta ggagttcctc tgagaggcct tataaatcaa catatgtgtc 1800
447 acaacataaa tagaacctgt taccttattt gctacacttt gtttagagcc agctttaaaa 1860
449 gaacaaagca atgcacacca ttttcttact tgagtatttc aattacactt aaattgaatt 1920
451 ttattctctt tctaattata taaacaccag tgtatacatg aatactaagt ttgttatttc 1980
453 aagcacattt tctaggtagc agtttaagga ctggttacaa tgtaaccacc tcattcaaca 2040
455 gatggatcaa ctcagcctag acccagtcac ctaattcatc agagaagggtg aaatgcaggg 2100
457 cctactgtgc agctccctc tcaactgtat ctgtttccct gatggaggac agggttacta 2160
459 ccggtatggg ttcttaggaa agagaggtca gggacctggt tccaattcat cgcaaccatc 2220
461 aacctcttcc ttcatagacc ctaccagttt gcaaacaca aaaaagggtc aggattcatt 2280

```

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/539,110

DATE: 02/26/2007

TIME: 12:03:46

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\02262007\J539110.raw

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date